

Title (en)

TREATMENT FLUID SUCTION DEVICE AND ETCHING APPARATUS USING THIS DEVICE

Title (de)

BEHANDLUNGSFLUID-ABSAUGVORRICHTUNG UND DIESE ENTHALTENDE ÄTZVORRICHTUNG

Title (fr)

DISPOSITIF D'ASPIRATION D'UN LIQUIDE DE TRAITEMENT ET APPAREIL DE GRAVURE UTILISANT CE DISPOSITIF

Publication

EP 3370888 A1 20180912 (DE)

Application

EP 16785116 A 20161019

Priority

- DE 102015221646 A 20151104
- EP 2016075029 W 20161019

Abstract (en)

[origin: WO2017076640A1] The invention relates to an extracting device for extracting a treatment fluid from a substantially planar treatment surface (3a) of treatment substrates (3) transported by means of transporting rollers (8, 10) along a substantially horizontal transporting direction, comprising a suction source, an extraction control unit activating the latter, and an extraction tube unit connected to the suction source and having at least one extraction lance, which can be positioned with one or more inlet-side extraction nozzle openings at an extracting distance from the treatment surface. The invention also relates to an etching device equipped with such an extracting device. In the case of an extracting device according to the invention, the suction source and the extraction control unit are designed for a suction volume flow for each extraction lance of at least 30 m³/h and a suction vacuum of no more than 8 kPa. In addition or as an alternative, the extraction lance has a comb-like extraction structure with an extraction collecting tube (17) and a number of extraction tubes (18) that extend from the extraction collecting tube in a comb-like manner and have the extraction nozzle openings (19) on the inlet side. Use for example for etching printed circuit boards, conductor films or semiconductor wafers.

IPC 8 full level

B08B 5/04 (2006.01); **C23F 1/08** (2006.01); **H01L 21/67** (2006.01); **H01L 21/677** (2006.01); **H05K 3/00** (2006.01); **H05K 3/06** (2006.01)

CPC (source: EP KR US)

C23F 1/08 (2013.01 - EP KR US); **H01L 21/6708** (2013.01 - EP KR US); **H01L 21/6776** (2013.01 - EP KR US);
H05K 3/068 (2013.01 - EP KR US); **H05K 3/0085** (2013.01 - EP KR US); **H05K 2203/075** (2013.01 - EP KR US); **H05K 2203/082** (2013.01 - US);
H05K 2203/085 (2013.01 - EP KR US); **H05K 2203/1545** (2013.01 - US)

Citation (search report)

See references of WO 2017076640A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102015221646 A1 20170504; DE 102015221646 A8 20171102; CN 108472693 A 20180831; CN 108472693 B 20210608;
EP 3370888 A1 20180912; EP 3370888 B1 20200422; KR 102545295 B1 20230619; KR 20180079397 A 20180710; MY 188634 A 20211222;
TW 201728241 A 20170801; TW I730996 B 20210621; US 2018324954 A1 20181108; WO 2017076640 A1 20170511

DOCDB simple family (application)

DE 102015221646 A 20151104; CN 201680077827 A 20161019; EP 16785116 A 20161019; EP 2016075029 W 20161019;
KR 20187015357 A 20161019; MY PI2018701756 A 20161019; TW 105135587 A 20161102; US 201615773701 A 20161019